

Table 1.

Year	Salary	Growth	CPI	Inflation	Real Growth
1997	\$ 91,218.24		160.5		
1998	93,955.00	3.00%	163.0	1.56%	1.44%
1999	96,773.65	3.00%	166.6	2.21%	0.79%
2000	99,270.76	2.58%	172.2	3.36%	-0.78%
2001	102,268.98	3.02%	177.1	2.85%	0.17%
Average					0.41%

Personal Consumption

I asked Monica Gabrielle to provide information regarding changes in the household budget since the death of her husband. I conducted a personal interview with her using a model budget of household expenditures used by the U.S. Department of Labor that breaks the typical budget down into categories. She indicated that her husband was a frugal man and lived an unpretentious lifestyle. He did not have a large or expensive wardrobe. Expenditures on the home, utilities, furnishings, and other major categories show no real change. The primary change was in the cost of owning and maintaining one less vehicle, clothing, food, personal care items and services, and some vacation expenses. Most entertainment expenses were covered by Richard's expense account at Aon. This information is consistent with estimates commonly relied upon in published research. I have used the equations from the Patton-Nelson model to estimate the personal consumption of Richard Gabrielle in my analysis of damages because it is widely accepted as an objective model for personal consumption and because it conforms to the actual changes in the Gabrielle household budget.¹

Present Value

Once the value of lost future earnings, net of consumption, has been established, it must be reduced to present value. That is, one must determine how much money would have to be set aside and invested today to provide the future financial support that was lost in each period. The only element in calculating the present value that is uncertain is the net rate of return that will be earned on the funds that are invested for future use.

The courts have found that it is reasonable to use a real rate of return in the range of 1% to 3% that is net of taxes on the earnings. In 1983, the United States Supreme Court ruled in *Jones & Laughlin Steel Corp. v. Pfeifer* that 1% to 3% is an appropriate discount rate interval within which courts may operate without risk of reversal on appeal². In this case, a net real discount rate of 2 % would be conservative and is in line

¹ This model estimates the proportion of income spent on a family member based on income, gender, and household structure. See "Patton-Nelson Personal Consumption Tables Updated", *Journal of Forensic Economics*, by Lierman, Patton, and Nelson; Winter, 1998, 11(1), 3-7.

² For a discussion of *Pfeifer* and related cases, see George, Simien & Culbertson, "The Courts and Inflation", *TRIAL*, July 1984, p22.

with the net real rate of return on a combination of long and medium term securities as currently reflected in the financial markets³.

Determination of Lost Economic Support

The method used to estimate the present value of lost income is straightforward. The computations are shown in Table 2. The first column in the table shows the year in which Mr. Gabrielle could have worked had he not been killed. The second column indicates his age in each year up to age 65. The third column contains his estimated income he would have received had he lived. The earnings are based on a real rate of growth of .41% for all future years. For past years, the increase is a nominal increase of 3%. Personal consumption is then netted out based on the model and tables cited earlier. The net difference is then discounted to present value using a net real discount rate of 2% as described above. The final total given at the bottom of the table is over \$1.37 million and represents the present value of net lost earnings that would accrue to the household.

**Present Value of Lost Earnings
Resulting from the Death of Richard Gabrielle
Table 2.**

Year	Age	Earnings	Benefits	Total	Consumption	Net Loss	Present Value
2001	51	\$ 13,299.26	\$ 5,625.00	\$ 18,924.26	\$ 6,638.36	\$ 12,286	\$ 12,285.90
2002	52	105,337.05	5,793.54	111,130.59	15,760.46	95,370.13	95,370.13
2003	53	108,497.16	5,967.34	114,464.50	15,956.30	98,508.20	98,508.20
2004	54	111,752.08	6,146.36	117,898.44	16,154.58	101,743.86	101,743.86
2005	55	115,104.64	6,330.76	121,435.39	16,355.33	105,080.06	104,557.57
2006	56	115,576.57	6,356.71	121,933.28	16,383.31	105,549.96	103,033.52
2007	57	116,050.43	6,382.77	122,433.20	16,411.35	106,021.86	101,446.54
2008	58	116,526.24	6,408.94	122,935.18	16,439.42	106,495.76	99,883.89
2009	59	117,004.00	6,435.22	123,439.22	16,467.55	106,971.66	98,345.21
2010	60	117,483.71	6,461.60	123,945.32	16,495.73	107,449.59	96,830.14
2011	61	117,965.39	6,488.10	124,453.49	16,523.95	107,929.54	95,338.32
2012	62	118,449.05	6,514.70	124,963.75	16,552.22	108,411.53	93,869.38
2013	63	118,934.69	6,541.41	125,476.10	16,580.54	108,895.56	92,422.99
2014	64	119,422.33	6,568.23	125,990.55	16,608.91	109,381.64	90,998.79
2015	65	119,911.96	6,595.16	126,507.12	16,637.33	109,869.78	89,596.45
Total							\$ 1,374,231

Lost Pension Payments

Richard Gabrielle would have been eligible for pension benefits upon retirement had he not died. His actuarial life expectancy at the time of death was 78 years of age.

³In cases where the number of years taken into account is great, such as in this case, the discount rate used reflects the rate of return earned on a portfolio of short, medium and long term securities as the losses must be compensated over a variety of time horizons. No one interest rate or security is appropriate.

The benefit is based on a formula provided in a description of the Aon pension plan. There are a number of options available under the plan. The estimate of the present value of lost pension benefits here is based on the "normal retirement" option. The formula to determine the pension benefits is the average of the five highest years out of the last 10 of earnings prior to retirement times 2% times the number of years of service (up to 30) plus .75% of years over 30 (to a maximum of 5) less 1.667% of years of Social Security (up to 30) times estimated Social Security benefit. At the time of his death, Richard Gabrielle was vested in the plan and had 9 years of service. Monica Gabrielle will receive a survivor's pension benefit of \$211.58 per month beginning January of 2006. The future loss to her will be equal to the present value of the difference between that survivor benefit and what her husband's retirement would have been had he lived, less his personal consumption. The computations for the retirement period are shown in Table 3. The figure at the bottom of the last column is the loss from age 65 through the life expectancy of Richard Gabrielle had he not been killed. This figure of \$233,034.83 has to be reduced by the present value of the survivor payments Monica will receive between 2006 and 2015 that equals \$22,806.42. The net loss from reduced pension benefits, therefore, is approximately \$210,228.41.

**Present Value of Lost Pension Benefits
Resulting From the Death of Richard Gabrielle
Table 3.**

Year	Age	Estimated Benefit	Survivor Benefit	Consumption	Net Loss	Present Value
2016	65	\$ 36,076.01	\$ 2,538.96	\$ 10,072.46	\$ 23,464.59	\$ 18,871.70
2017	66	36,076.01	2,538.96	10,072.46	23,464.59	18,501.67
2018	67	36,076.01	2,538.96	10,072.46	23,464.59	18,138.89
2019	68	36,076.01	2,538.96	10,072.46	23,464.59	17,783.23
2020	69	36,076.01	2,538.96	10,072.46	23,464.59	17,434.54
2021	70	36,076.01	2,538.96	10,072.46	23,464.59	17,092.68
2022	71	36,076.01	2,538.96	10,072.46	23,464.59	16,757.53
2023	72	36,076.01	2,538.96	10,072.46	23,464.59	16,428.95
2024	73	36,076.01	2,538.96	10,072.46	23,464.59	16,106.82
2025	74	36,076.01	2,538.96	10,072.46	23,464.59	15,791.00
2026	75	36,076.01	2,538.96	10,072.46	23,464.59	15,481.37
2027	76	36,076.01	2,538.96	10,072.46	23,464.59	15,177.81
2028	77	36,076.01	2,538.96	10,072.46	23,464.59	14,880.21
2029	78	36,076.01	2,538.96	10,072.46	23,464.59	14,588.44
Total						\$ 233,034.83

Estimated Value of Lost Household Services

In addition to lost support from employment, there is also a loss of household services such as maintenance, yard work, snow removal, financial management, cleaning, cooking, and other contributions made by Richard Gabrielle prior to his death.

The most reliable and widely recognized studies estimate the number of hours per year that a person spends working in the home based on the size of the household, its structure, the employment status of the adult members, and the age of the youngest child.⁴ In this case, the Gabrielle household had two adults who worked full-time and their daughter was emancipated. Table 4 shows the computations that are involved using the estimated hours of work for a male in this situation. The first column shows the year. The second column indicates the number of hours Richard Gabrielle would have been reasonably expected to work on household services had he been alive in that year. The third column places a dollar value on those hours using an average rate for services of \$15.00 per hour. The final column shows the present value of that value in each year. These computations cover the period from the time of Mr. Gabrielle's death in 2001 until he would have reached the age of 75. The present value of those lost services is estimated at \$114,928.

Results of the Analysis

Based on the forgoing analysis, it is my opinion to a reasonable degree of economic certainty that the present value of the net economic loss arising from the death of Richard Gabrielle approximately \$1.7 million.

Summary of Economic Damages
Resulting From the Death of Richard Gabrielle
Table 5.

Present Value of Lost Earnings	\$ 1,374,231.00
Present Value of Lost Retirement Benefits	210,228.41
Present Value of Lost Household Services	114,928.25
Total	\$ 1,699,387.66

This estimate does not include any compensation for emotional loss, loss of consortium, or emotional distress. I reserve my right to supplement this opinion in a timely fashion should any new information be made available.



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⁴ David H. Ciscel and David C. Sharp, *Journal of Forensic Economics*, 8(2), 1995, pp. 115-123.

Resulting from the Death of Richard Gabrielle
Table 4

Year	Age	Hours	Value	Present Value
2001	51	93	1,395.00	1,395.00
2002	52	372	5,580.00	5,580.00
2003	53	372	5,580.00	5,580.00
2004	54	372	5,580.00	5,580.00
2005	55	372	5,580.00	5,552.25
2006	56	372	5,580.00	5,470.59
2007	57	372	5,580.00	5,363.32
2008	58	372	5,580.00	5,258.16
2009	59	372	5,580.00	5,155.06
2010	60	372	5,580.00	5,053.98
2011	61	372	5,580.00	4,954.88
2012	62	372	5,580.00	4,857.73
2013	63	372	5,580.00	4,762.48
2014	64	372	5,580.00	4,669.09
2015	65	372	5,580.00	4,577.54
2016	66	372	5,580.00	4,487.79
2017	67	372	5,580.00	4,399.79
2018	68	372	5,580.00	4,313.52
2019	69	372	5,580.00	4,228.94
2020	70	372	5,580.00	4,146.02
2021	71	372	5,580.00	4,064.73
2022	72	372	5,580.00	3,985.03
2023	73	372	5,580.00	3,906.89
2024	74	372	5,580.00	3,830.28
2025	75	372	5,580.00	3,755.18
Total				\$ 114,928.25